Amendments to the Specification:

Please replace the paragraph beginning on page 2, line 17 with the following amended paragraph.

However, as a result of the tightly packed ~~beds,,~~ beds, a significant pressure loss is incurred. Current solutions for minimizing pressure loss include decreasing air velocity through the bed by increased bed area. This can be done by an increase in bed size, forming the beds into V's, or pleating. Unfortunately, these methods do not adequately address the pressure loss issue, however, and can create an additional problem of non-uniform flow velocities exiting the bed.

Please replace the paragraph beginning on page 4, line 26 with the following amended paragraph.

Figure 6B is a schematic depiction of a second apparatus for Push-Pull coating ~~and~~ an adsorptive element according to the present invention;

Please replace the paragraph beginning on page 6, line 12 with the following amended paragraph.

Coating 20' of Figure 3 differs from coating 20 of Figure 2 in that coating 20' comprises a plurality of adsorptive media particles 22 randomly, and generally homogeneously, dispersed within adhesive 30 that binds media 22 to cells 14. Adhesive 30 essentially covers the entire surface of adsorptive media 22. Coating 20' can be referred to as a "slurry". Typically, media 22 used in coating 20' is smaller in particle size than media used for coating 20, above. Suitable sizes of media 22 for coating 20' include 400 mesh (about 20-25 micrometers) and 250 mesh (about 40 micrometers), although media 22 sizes ranging from 10 micrometers to about 80 micrometers are suitable. The same media 22 as used for coating 20, above, can be used for coating 20'. Additionally, irregularly shaped media 22, where the particles are not generally

spherically shaped ~~and~~ nor fall within a tight size distribution, can be used in coating 20'. Methods for making coating 20' are also described below.

Please replace the paragraph beginning on page 6, line 26 with the following amended paragraph.

Body 12 provides the overall structure of adsorptive element 10; body 12 defines the shape and size of element 10. Body 12 can have any three-dimensional shape, such as a cube, cylinder, cone, truncated cone, pyramid, truncated pyramid, disk, etc., however, it is preferred that first face 17 and second face 19 ~~has~~ <u>have</u> essentially, or at least close to, the same area, to allow for equal flow into passages 16 as out from passages 16. The cross-sectional shape of body 12, defined by either or both of first face 17 and second face 19, can be any two dimensional shape, such as a square, rectangle, triangle, circle, star, oval, and the like. An annular shape can also be used. Preferably, the cross-section of body 12 is essentially constant along length "L" from first face 17 to second face 19.

Please replace the paragraph beginning on page 7, line 16 with the following amended paragraph.

Body 12 can be any material having the desired cell structure. Each of cells 14 has a cross-sectional area typically no greater than about 50 mm^2; this cross-sectional area is generally parallel to at least one of first face 17 and second face 19. Alternately or additionally, cells 14 typically have an area no less than about 1 mm^2. Generally the area of each cell 14 is about 1.5 to 30 mm^2, often about 2 to 4. In one preferred embodiment, the area of a hexagonal cell 14 is about 7 to 8 mm^2. In another preferred embodiment, the area of <u>a</u> hexagonal ~~a~~ cell 14 is 1.9 mm^2.

Please replace the paragraph beginning on page 7, line 26 with the following amended paragraph.

The longest cross-sectional ~~and~~ dimension of cells 14 is typically no greater than 10 mm, often no greater than 6 mm. Additionally, the shortest dimension of cells 14 is no less than 1 mm, often no less than 1.5 mm. In most embodiments, cells 14 have a maximum dimension of no greater than 5 mm.

Please replace the paragraph beginning on page 8, line 5 with the following amended paragraph.

The cell walls, which define the shape and size of cells 14 and passages 16, are generally at least 0.015 mm thick. Alternately or additionally, the cell walls are generally no thicker than 2 mm. Typically, the ~~cells~~ cell walls are no greater than 1 mm thick. In one preferred embodiment, the walls are no greater than 0.5 mm thick. In an alternate preferred embodiment, the cell walls are no greater than 0.1 mm thick. In some embodiments, the walls may be no greater than 0.02 mm thick. The thickness of the walls will vary depending on the size of cell 14, the size of passage 16, the material from which body 12 is made, and the intended use of element 10.

Please replace the paragraph beginning on page 10, line 3 with the following amended paragraph.

Oxidizing agents, available as particulate or powders, can also or alternatively be used in coating 20, 20'. Oxidizers, such as potassium permanganate ~~permangante~~, react with VOCs to form carbon dioxide and water.

Please replace the paragraph beginning on page 10, line 12 with the following amended paragraph.

Adsorptive coating 20, 20' can be constructed to filter out or otherwise remove airborne basic contaminant compounds that include organic bases such as ammonia, amines, amides, N-methyl-1,2-pyrrolidone, sodium hydroxides, lithium hydroxides, potassium hydroxides, volatile organic bases and nonvolatile organic bases. Alternately, adsorptive coating 20, 20' can be constructed to filter out airborne acidic compounds such as sulfur oxides, nitrogen oxides, hydrogen sulfide, hydrogen chloride, and volatile organic acids and nonvolatile organic acids. It is understood that in addition to removing, for example, acidic compounds or basic compounds, adsorptive media 22 can ~~adsorb~~ absorb or adsorb additional contaminants, such as hydrocarbons, or polar or non-polar organics. Examples of organics include any of the components of gasoline and diesel fuels.

Please replace the paragraph beginning on page 10, line 27 with the following amended paragraph.

In a preferred embodiment, adsorptive media 22 is activated carbon granules impregnated with, or having a surface coating thereon, of a reactive or other modifying agent. The granules generally have a ~~particles~~ particle size as small as about 10 micrometers, or as large as 600 micrometers (about 30 mesh). If the adsorptive media granules are too large, passage 16 may be unacceptably blocked or restricted by the media. In most embodiments, the granules have a particles size of about 35 (about 400 mesh) to 50 micrometers (about 300 mesh).

Please replace the paragraph beginning on page 14, line 26 with the following amended paragraph.

Figure 6A, which schematically depicts a first push-pull apparatus, shows an apparatus 40, a holder 42 for body 12, and a pump 44. See also, Figure 6B, which shows an apparatus 40',

a first holder 42a for a body 12a and a second holder 42b for a second body 12b. A pump 44' provides the adsorptive slurry from tank 45' to bodies 12a, 12b. Appropriate piping is used to connect holders 42a, 42b, pump 44' and tank 45'. After being ~~coating~~ coated in holders 42a, 42b, bodies 12a, 12b are relocated to holder 42c (as body 12c ~~42c~~) where an air knife 46 removes excess slurry from body 12c. The excess slurry drains to tank 45", from which it is recycled to tank 45' and reused.

Please replace the paragraph beginning on page 15, line 22 with the following amended paragraph.

A further method for providing an adsorptive coating 20 is a "melt-matrix" approach that binds adsorptive media 22 to body 12 by gently melting, or at least softening, body 12 in the presence of adsorptive media 22. Body 12, or a portion of body 12, functions as adhesive 30. To coat body 12, body 12 is embedded into a bed of adsorptive media 22. The media 22 and body 12 are heated to the melting or softening point of the body and allowed to ~~site~~ sit and at least partially cool. Adsorptive media 22 adheres to the melted or softened body 12. Body 12 could be partially melted prior to embedding into media 22. Additionally, instead of embedding body 12 into a bed of media 22, adsorptive media 22 can be shaken or sprinkled onto melted body 12.

Please replace the paragraph beginning on page 16, line 9 with the following amended paragraph.

Yet another method for providing an adsorptive coating is to pyrolyze a polymer carbon precursor that is coated onto a body substrate. In some embodiments it may be preferred that the body is a ceramic material. First, the body is contacted with a polymer carbon precursor, which is a polymeric material having available carbon groups; examples of typical polymer carbon precursors include polyacrylonitrile (PAN), phenolic resin, polyimide resin, furanic resin, and furfuryl alcohol. The body can be air blown to remove any excess polymeric material, after

which the polymeric carbon precursor is cured by heating. The coated <u>body</u> ~~bodt~~, with the polymeric carbon precursor, is heated under conditions effective to convert the cured polymeric carbon precursor to carbon, generally, at a temperature of about 400°C to 1200°C, and usually about 600°C to 800°C. Activation of the carbon can be done by either chemical or physical activation. Physical activation done by using gasification agents (CO_2 or steam), while a chemical activation agent ($ZnCl_2$) can be used for chemical activation before the carbonization step.